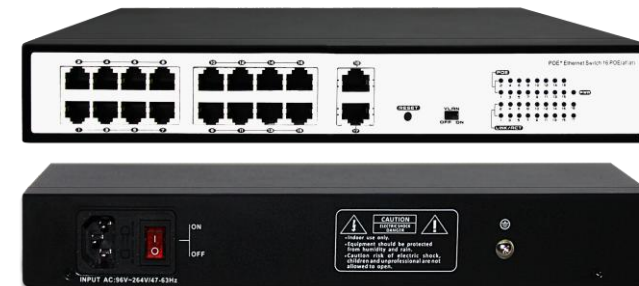


Model: POE-SW1602E

Features

16-Port 10/100Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)

- Comply with IEEE802.3, IEEE802.3u, IEEE802.3af/at standards
- Support IEEE802.3x full-duplex flow control; support Auto MDI/MDIX
- 16 Port support 48V-56VDC power to PoE powered devices
- Provide 15.4W or 30W power to powered devices
- 2 Gigabit uplink port: 10/100/1000Mbps RJ-45
- 250-watts PoE budget
- PoE data & power transmission distance up to 100meters
- Excellent anti-thunder, anti-static and anti-interference ability
- Surge Protection: 6KV
- Port based VLAN for Enhanced Security
- Transmission distance max up to 250 meters when VLAN is enabled
- Restart function helps master IC reset wholly
- Easy and convenient to use, plug & play, no need to configure
- Built-in 250W power supply
- Galvanized housing for stable and durable working life



Overview

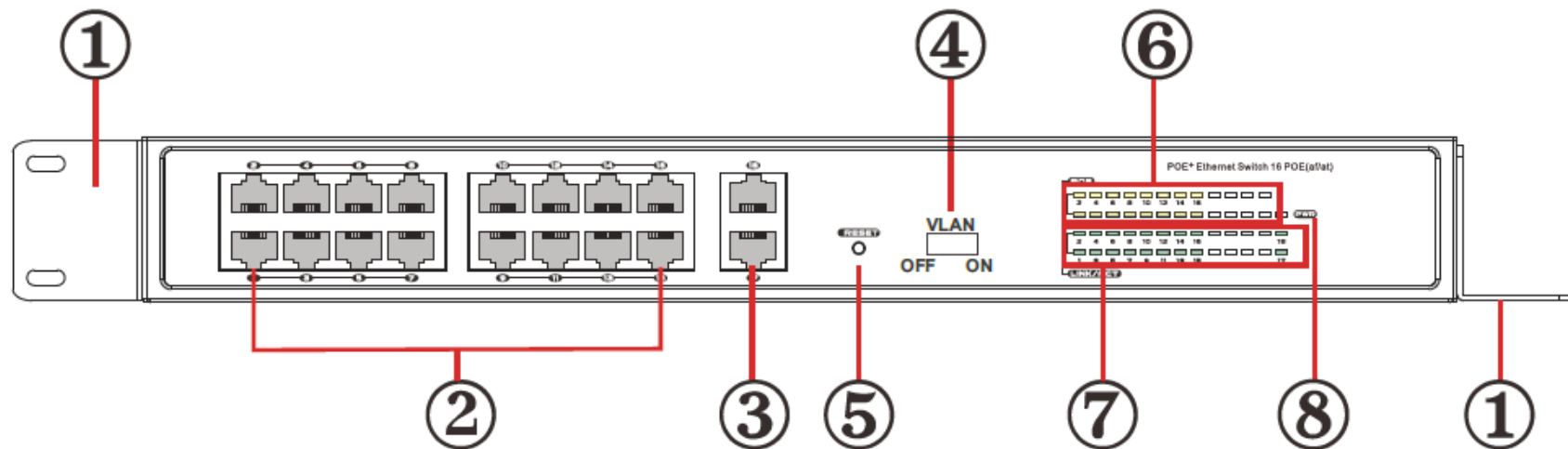
The POE-SW1602E provides 16 port 10/100Mbps IEEE 802.3af/at Power over Ethernet with a total of 250 watts of PoE budget, which is an ideal solution to fulfill the demand of sufficient PoE power for network applications.

The POE-SW1602E is an ideal solution for securing IP surveillance infrastructure. It provides both 802.3af/at PoE functions along with 16 x 10/100Base-TX ports featuring 15.4-watt-802.3af/30-watt 802.3at PoE in RJ-45 interfaces and extra 2 uplink Port 10/100/1000Mbps RJ-45 to keep a cascade connection with another switch or NVR. For instance, one POE-SW1602E can be combined with one 16 Channel NVR and 16 PoE IP cameras as a kit for the administrators to centrally and efficiently manage the surveillance system in the local LAN and the remote site via Internet.

With data and power over Ethernet from one unit, the POE-SW1602E reduces cabling requirements and eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place. A wire that carries both data and power can lower the installation costs, simplify the installation effort and eliminate the need for electricians or extension cords. Providing 16 PoE interfaces, the POE-SW1602E is ideal for small businesses and work-groups requiring deploying the PoE for the wireless access points, IP-based surveillance IP phones in any places easily, efficiently and cost-effectively.

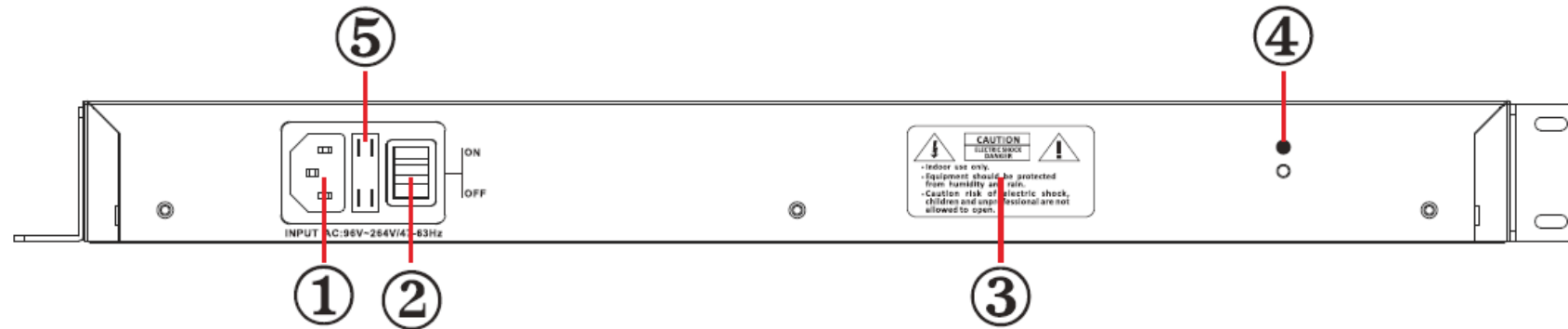
Front & Rear Panel

Front Panel



- ① Rack - mounting ears: Cabinets for product installation or Wall installation
- ② Downlink Port: Transfer data from other IP devices to the switch
- ③ Uplink Gigabit RJ-45 port: Transfer data from PoE ports to other devices(NVR/Switch/ADSL)
- ④ VLAN Button: Turn on VLAN button: indicator on and VLAN function starts
Turn off VLAN button: indicator off and VLAN function stops
- ⑤ Rest Button: Whole machine will restart while press the button
- ⑥ PoE Indicator: Yellow Light on: when device is powered
Light off: when device is not detected or not powered
- ⑦ Link/ Act Indicator: Green LED on: link up off: link down blinks: data transfer
- ⑧ Power Indicator: Red Light on: with power Light off: no power

Rear Panel



- ① Input AC 96~264V
- ② Power Switch: Turn on with power, Turn off no power
- ③ Warning contents
- ④ Ground Connection
- ⑤ Fuse: Max 10A

VLAN Introduction

At present, applications of Ethernet switch is very wide. To satisfy the needs of various customers, it is urgent for network services to solve the problems of broadcast domains, bandwidth and security, so a new kind of technology of VLAN emerged.

Each DOWNLINK RJ-45 port and UPLINK RJ-45 port form a separate workstations respectively. In the same VLAN workstation, regardless of which switch they are actually connected to, the communication between them is as if they were on a separate switch. Broadcasts in the same VLAN can only be heard by members of the VLAN, but not in other VLANs, which can control the generation of unwanted broadcast storms. At the same time, if there is no routing, different VLANs cannot communicate with each other, which increases the security of different departments in the enterprise network.

When the VLAN mode is enabled, the data cannot be forwarded among DOWNLINK RJ-45 ports, but DOWNLINK ports and UPLINK RJ-45 port can communicate with each other. The bandwidth of DOWNLINK RJ-45 port is forced to 10Mbps mode to adapt to the long distance transmission of max 250meters. The bandwidth of UPLINK RJ-45 port is 100Mbps, which keeps a cascade connection with another switch or NVR.

Note:

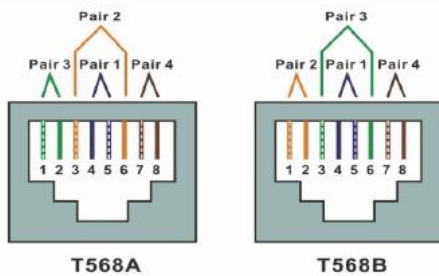
After you turn on VLAN button, please press reset button or reboot power the device, then VLAN mode is enabled.

How to make a network cable

To create a network cable, you will first need the equipment listed below.

1. Cat5e, Cat6, or Cat7 cable
2. RJ-45 connectors
3. Crimping tool
4. Wire stripper or Knife

RJ 45 Define



	1	2	3	4	5	6	7	8
T568A	White Green	Green	White Orange	Blue	White Blue	Orange	White Brown	Brown
T568B	White Orange	Orange	White Green	Blue	White Blue	Green	White Brown	Brown

The wire sequence of RJ45 connector must comply with international standard of EIA/TIA 568A or EIA/TIA 568B.

- 1) We recommend stripping at least a half of an inch off of the cable to expose the inner wires.
- 2) Separate the wires within the cable after the network cable jacket has been removed so that they can be put into the RJ-45 connector.
- 3) The CAT5 twisted-pair cable consist of four twisted wires, each color coded; 8 wires must be correctly lined as the standards of EIA/TIA 568A or EIA/TIA 568B.
- 4) Cut thread residue and leave 1.5cm wire exposed outside the insulating layer and ensure 8 wires are straighten and neat.
- 5) Place the cable into the RJ-45 connector and then use the crimping tool to attach the connector.
- 6) Repeat above steps for the other end of the cable; the wire sequence of both ends of the cable is suggested to be identical.
- 7) Make sure to test the cables before installing them once both ends of the cable have been completed.

Note:

All RJ-45 Ports of this device support Auto MDI/MDIX, so the different wire sequence of both ends of the cable is allowed.

Quick Setup Guide

Package Contents

- | | |
|-------------------------|-----------------------|
| 1) POE-SW1602E: 1pc | 2) AC power cord: 1pc |
| 3) Mounting-ears : 2pcs | 4) Manual: 1pc |
| 5) Screw: 10pcs | 6) Rubber feet: 4pcs |

Step1: Begin with all input/output devices turned off with power cables removed.

Step2: Connect RJ-45 port of PoE cameras with  of Downlink port of PoE switches in standard Cat 5e/6 cables.

Step3: Connect  Uplink port of PoE switches with RJ-45 port of NVR or compute or other devices in standard Cat 5e/6 cables.

Step 4: Connect 53VDC/2.5A power adaptor into  PoE switches.

Step 5: Make sure above connection is properly finished, then turn on power.

Technical Specifications

Model		POE-SW1602E
Product Name		16-Port 10/100Mbps IEEE 802.3af/at PoE Switch (End-Span PSE)
Power Supply	Power Supply Mode	Built-in Power Supply
	Voltage Range	AC96~264V
	Power Consumption	The device <5W POE power supply <250W
Network Port Parameter	Network Port	Ethernet Downlink Port: 10/100Mbps 2 Gigabit Uplink Port: 10/100/1000Mbps RJ-45
	Transmission Distance	Downlink port: 100m Uplink port: 100m
	Transmission Medium	Downlink Port: Cat5e/6 standard cable Uplink Port: Cat5e/6 standard cable
	POE Standards	IEEE802.3af/at
	PoE Power Supply Mode	End-span method
	PoE Power Supply Wattage	Each port ≤30W Whole device≤250W
Network Switch Specification	Network Standards	IEEE802.3, IEEE802.3ab, IEEE802.3ad, IEEE802.3u, IEEE802.3az, IEEE802.3z
	Swap Mode	Store-and- forward
	Data-Caching Mechanism	4M
	MAC Address List	16K
	Backplane Bandwidth	7.2Gbps
Indicator/Button	Power Indicator	Red LED on: power on
	Uplink Gigabit Port	Green LED on: link up, off: link down, blinks: data transfer
	PoE Indicator	16 PoE indicators (Yellow)
	PoE Network Port Indicator	16 port indicators blink while data transfer
	Reset Button	Press the reset button to turn on indicator (green) and the device restarts
Protection Level	Surge Protection	6KV(common mode),10/700us IEC61000-4-5 2KV(differential mode),10/700us IEC610000-4-5
	Electrostatic Protection	Contact Discharge: ±4KV Air Discharge: ±6KV Standard: IEC61000-4-2
Reliability	Mean time between failures (MTBF)	>50000h
Mechanical	Dimensions (L*W*H)	300mmx221mmx43.6mm
	Housing	Galvanized
	Body Color	Black

	Net Weight	2.5g
Environmental	Operating Temperature	0°C~55°C
	Storage Temperature	-40°C~85°C
	Relative Humidity	0~95% (non-condensing)

Applications

- Security Monitoring System
- Multimedia Network Teaching System
- Medical Monitoring Display System
- Industrial Automation Control System
- Banking, securities, financial information display system
- Remote Network Server Monitoring
- Department Store Security
- Casino Security
- Hospitals, Airports and banks
- School Campuses

Application Diagram

